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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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TREVOR K. BYLSMA

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EXAMINER

MAIS, MARK A

ART UNIT

PAPER NUMBER

2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/418,647

Applicant(s)

BYLSMA ET AL.

Examiner

Mark A. Mais

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13, 14, 20 and 21 is/are allowed.
- 6) ☒ Claim(s) 1-12, 15-19 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 4-8, 10, 15, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Krishnamurthy et al. (USP 6,389,464).

3. With regard to claim 1, Krishnamurthy et al. discloses a method for management of a network [**Abstract; site server provides universal device management system including multi-vendor equipment, col. 17, lines 35-45**], comprising:

receiving a new set of indicators corresponding to a node in the network,
wherein the new set of indicators includes functional characteristics of the node,
wherein each indicator of the new set of indicators corresponds to a particular functional characteristic [**users enter data or select options on forms in order to enter configuration data, col. 8, lines 48-51; configuration data entry is interpreted as**

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entering indicators for a particular functional characteristic (the functional characteristic is interpreted as the configuration of the device such as device class, device number within the class, or port number of the device, col. 11, lines 39-61));

storing the new set of indicators in a database, wherein the database includes sets of indicators corresponding to at least one additional node in the network; and utilizing the database including the new set of indicators to perform network management functions **[the relational database organizes information (interpreted as storing information) into tables wherein each table has rows and each row has named columns wherein the relational database allows rows or specific columns within the rows to be selected for queries, col. 7, lines 44-50; see also col. 6, lines 58-65 describing how the relational data, when used with the MIB files, allows different kinds of device interfaces to be managed by a single manager (i.e., performing network management functions)].**

4. With regard to claims 4, 5, and 18, Krishnamurthy et al. discloses that each set of indicators includes indicators indicating functional support at multiple hierarchical levels within a node to which the set of indicators corresponds **[users enter data or select options on forms in order to enter configuration data, col. 8, lines 48-51; the configuration itself indicates hierarchical levels such as device class, device number within the class, or port number of the device (claim 5), col. 11, lines 39-61].**

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5. With regard to claim 6, Krishnamurthy et al. discloses that the set of indicators further includes physical characteristics of the node **[users enter data or select options on forms in order to enter configuration data, col. 8, lines 48-51; the configuration itself indicates physical characteristics such as device class, device number within the class, or port number of the device, col. 11, lines 39-61].**

6. With regard to claims 7 and 19, Krishnamurthy et al. discloses determining routing paths in the network **[site server provides consolidated controls of switches, routers, and servers, col. 4, lines 20-26 and col. 18, lines 40-45; in addition, can configure alternate paths, col. 5, lines 56-59].**

7. With regard to claim 8, Krishnamurthy et al. discloses configuring path endpoints in the network **[site server configures system-wide parameters as well as devices and ports that connect the devices to the site server (interpreted as configuring path endpoints), col. 10, lines 48-54].**

8. With regard to claims 10, Krishnamurthy et al. discloses a method for **communicating a set of characteristics of a node in a communications network** [Abstract; site server provides universal device management system including multi-vendor equipment, col. 17, lines 35-45], **comprising:**

determining functional characteristics for the node **[the functional characteristic is interpreted as the configuration of the device such as device class, device number within the class, or port number of the device, col. 11, lines 39-61];**

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generating a set of indicators corresponding to the functional characteristics, wherein each indicator of the set of indicators corresponds to a particular functional characteristic **[users enter data or select options on forms in order to enter configuration data, col. 8, lines 48-51; configuration data entry is interpreted as entering indicators for a particular functional characteristic (the functional characteristic is interpreted as the configuration of the device such as device class, device number within the class, or port number of the device, col. 11, lines 39-61)]**; and

combining the set of indicators with physical characteristic information **[physical characteristic information is interpreted as a subset of the functional characteristic, e.g., port number of the device, col. 11, lines 39-61]** of the node to produce the set of characteristics for the node **[the relational database organizes information (interpreted as storing information) into tables wherein each table has rows and each row has named columns wherein the relational database allows rows or specific columns within the rows to be selected for queries, col. 7, lines 44-50; see also col. 6, lines 58-65 describing how the relational data, when used with the MIB files, allows different kinds of device interfaces to be managed by a single manager (i.e., performing network management functions)]**.

9. With regard to claim 15, Krishnamurthy et al. discloses a network management processor **[Abstract; site server provides universal device management system including multi-vendor equipment, col. 17, lines 35-45]**, comprising:

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a processing module; and memory operably coupled to the processing module, wherein the memory includes operating instructions that cause the processing module to **[site server has a CPU with 16M of RAM, and an operating system running application software, col. 7, lines 15-38];**

store a received new set of indicators in a database, wherein the new set of indicators corresponds to a node in a network, wherein the database includes indicators corresponding to at least one additional node in the network, wherein the new set of indicators includes functional characteristics of the node, wherein each indicator of the new set of indicators corresponds to a particular functional characteristic **[users enter data or select options on forms in order to enter configuration data, col. 8, lines 48-51; configuration data entry is interpreted as entering indicators for a particular functional characteristic (the functional characteristic is interpreted as the configuration of the device such as device class, device number within the class, or port number of the device, col. 11, lines 39-61)];** and

perform network management functions based on the database including the new set of indicators **[the relational database organizes information (interpreted as storing information) into tables wherein each table has rows and each row has named columns wherein the relational database allows rows or specific columns within the rows to be selected for queries, col. 7, lines 44-50; see also col. 6, lines 58-65 describing how the relational data, when used with the MIB files, allows different kinds of device interfaces to be managed by a single manager (i.e., performing network management functions)].**

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 2, 3, 11, 12, 16, 17, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnamurthy et al..

12. With regard to claims 2, 16 and 22, Krishnamurthy et al. discloses that a user can access the site server and enter/amend configuration data **[col. 8, lines 48-51]**. Moreover, Krishnamurthy et al. discloses that the relational database organizes tables into rows and columns and can access very specific rows or columns within rows for queries **[col. 7, lines 44-50]**. Krishnamurthy et al. does not specifically disclose that the predetermined arrangement **(interpreted as the table)** corresponds to a functional characteristic **(the functional characteristic is the configuration of the device such as device class, device number within the class, or port number of the device, col. 11, lines 39-61)**.

However, Applicants have not disclosed that the specific placement of certain information within a table solves any stated problem or is for any particular purpose other than an optimization of a known method of placing objects/information within a table (e.g., a hashing function can be based on specific placement of objects/information). Accordingly, it would have been obvious to one of ordinary skill in the art at the time of

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the invention to modify the specific placement of objects/information within a table because such modifications are considered a mere design choice consideration, which fails to patentably distinguish over the prior art of Krishnamurthy et al. In addition, changing of the specific placement of certain objects/information within a table is interpreted as an optimum value for a known process. A discovery of an optimum value for a known process is obvious engineering. See In re Aller, 105 USPQ 233 (CCPA 1955).

13. With regard to claims 3, 11, 12, and 17, Krishnamurthy et al. discloses that a user can access the site server and enter/amend configuration data [**col. 8, lines 48-51**]. Moreover, Krishnamurthy et al. discloses that the relational database organizes tables into rows and columns and can access very specific rows or columns within rows for queries [**col. 7, lines 44-50**]. Krishnamurthy et al. does not specifically disclose that each set of indicators comprises a bit mapped value corresponding to a functional characteristic (**the functional characteristic is the configuration of the device such as device class, device number within the class, or port number of the device, col. 11, lines 39-61**).

However, bit mapped values are known to those in the art. Since the user is entering the configuration data, wherein configuration data entry is interpreted as an indicator, it is *necessarily* entered as a bit mapped value (**and must be based on a bit map template—claim 12**). Specifically, each keystroke entering/amending the configuration data [which can be entered as integers, bit values, hex values, ASC II, etc.], is a bit mapped value (**and must be based on a bit map template—claim 12**) corresponding to a functional characteristic (**the functional characteristic is the**

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configuration of the device such as device class, device number within the class, or port number of the device, col. 11, lines 39-61). Thus, it would have been obvious to have changed the bit mapped values of the indicators by entering different keystrokes to change the configurations so as to change the device class, device number (ID), and the port number of the device in order to allow the network management system to provide a universal device management platform **[col. 14, lines 50-54].**

14. With regard to claim 9, Krishnamurthy et al. discloses that the communication network is a combination of communication resources including the internet and wireless services **[col. 4, lines 1-6]**. Krishnamurthy et al. discloses controlling switches, routers, and servers across a packet-switched network **[col. 4, lines 20-24]**. Krishnamurthy et al. further discloses a packet-switched protocol such as Internet Protocol **[col. 2, lines 53-55]**. Krishnamurthy et al. does not specifically disclose using packet-switched protocols such as frame relay, ATM, or other packet-switched wireless protocols (e.g., MIP).

Packet-switched protocols are well known to those skilled in the art. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used frame relay, ATM, or MIP to send packets over the packet-switched network in order to communicate and route packets over a packet-switched network.

In the alternative, Applicants have not disclosed that a specific packet-switched protocol solves any stated problem or is for any particular purpose other than an optimization of using a packet-switched protocol. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a packet-switched protocol such as ATM, frame relay, or MIP, because such modifications are

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considered a mere design choice consideration, which fails to patentably distinguish over the prior art of Krishnamurthy et al. In addition, changing from one packet-switched protocol to another is interpreted as an optimum value for a known process. A discovery of an optimum value for a known process is obvious engineering. See In re Aller, 105 USPQ 233 (CCPA 1955).

Allowable Subject Matter

15. Claims 13, 14, 20, and 21 are allowed.

Response to Arguments

16. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new grounds of rejection.

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Mais whose telephone number is 572-272-3138.

The examiner can normally be reached on M-Th 5am-4pm.

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18. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

19. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MAM
December 12, 2006

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